AMENDMENTS TO THE CLAIMS

1. (Previously presented) A method for handling packet traffic in a data network comprising the steps of:

routing outgoing network layer packet traffic associated with a network layer connection from a selected source node to a local network accelerator associated with a node which is a source of the packet traffic for a destination node, the local network accelerator running a proxy application that operates as a proxy for the node that is the source of the packet traffic;

receiving, at the proxy application, intercepted packet traffic;

opening two or more persistent Transmission Control Protocol (TCP) transport layer end-to-end connections in parallel over at least one physical layer connection between the local network accelerator and at least one remote network accelerator, at least the two or more persistent TCP transport layer connections servicing the selected source node; and

striping the transmitting of processed packet traffic to at least one remote network accelerator associated with the destination node which is a destination of the packet traffic via at least the two or more persistent TCP transport layer connections, wherein the remote network accelerator runs another proxy application operating as a proxy for the destination node.

2. (Previously presented) A method as in Claim 1 wherein a proxy to proxy protocol is employed to specify at least an original TCP transport protocol identifier, original address, and original ports of the nodes.

3. (Previously presented) A method as in Claim 1 wherein the proxy application uses a dictionary based compression algorithm is to decode the data prior to transmission.

4. (Original) A method as in Claim 3 wherein a Huffman coding algorithm is applied to compress the data.

5. (Previously presented) A method as in Claim 3 wherein a dictionary associated with the network layer connection is utilized to service other network layer connections.

6. (Currently amended) A data network routing device comprising:

a router, connected to receive incoming packets from a source node, the router examining the incoming packets to determine if they are addressed to a destination node which is not local to the router, and if so, routing them to a socket interface; and

a proxy application, connected to receive incoming packets from the socket interface, the proxy application associated with the router, and the proxy application, acting as a proxy for the source node, also establishing multiple, persistent Transmission Control Protocol (TCP) transport layer end-to-end connections in parallel on behalf of the source node over at least one physical layer connection, the multiple, persistent TCP transport layer connections carrying packets striped in parallel to another proxy application operating as a separate proxy for the destination node.

7. (Original) A device as in Claim 6 additionally wherein

the proxy application additionally receives packets from a network connection addressed to a destination node which is local to the router.

8. (Original) A device as in Claim 7 wherein packets are compressed by the proxy application, additionally comprising:

a data decompressor, for decompressing packets so received; and

wherein the router also forwards decompressed packets to the destination node.

9. (Previously presented) A device as in Claim 6 wherein at least one TCP transport layer sessions are carried over a persistent connection established with another data network routing device having the other proxy application running thereon.

10. (Previously presented) A device as in Claim 6 wherein a proxy to proxy protocol is used to pass original source node and destination node information.

11. (Original) A device as in Claim 6 wherein a proxy to proxy protocol specifies an original protocol type for the packets.

12. (Canceled)

13. (Previously presented) A method for communicating a data stream between a source node and a destination node, comprising:

establishing a plurality of persistent Transmission Control Protocol (TCP) transport layer connections in parallel between a first proxy application in communication with the source node and a second proxy application in communication with the destination node, wherein the plurality of persistent TCP transport layer connections are provided between the first proxy application and the second proxy application over at least one physical layer connection;

enabling the first proxy application to forward the data stream from the source node to the destination node, wherein the data stream is provided over a first TCP transport layer client connection to the first proxy application, and wherein the first proxy application stripes the data stream over the plurality of persistent TCP transport layer connections between the first proxy application and the second proxy application; and

enabling the second proxy application to provide the striped data stream received over the plurality of persistent TCP transport layer connections to the destination node over a second TCP transport layer client connection.

14. (Previously presented) The method of Claim 13, further comprising:

enabling the communication of the data stream to the destination node to appear to the source node as occurring directly over the first TCP transport layer client connection; and

enabling communication with the source node to appear to the destination node as occurring directly over the second TCP transport layer client connection.

15. (Previously presented) The method of Claim 13, wherein enabling the first proxy application to receive the data stream for the destination node, further comprises enabling the first

proxy application to spoof an address associated with the source node for the first TCP transport layer client connection.

16. (Previously presented) The method of Claim 13, wherein enabling the second proxy application to provide the data stream to the destination node, further comprises enabling the second proxy application to spoof at least another address associated with the destination node for the second TCP transport layer client connection.

17. (Previously presented) The method of Claim 13, further comprising if the destination node is remote to the source node, providing the data stream to the first proxy application over a socket interface.

18. (Previously presented) The method of Claim 13, wherein if a plurality of data streams are provided over the plurality of persistent TCP transport layer connections, enabling the first proxy application to employ a dictionary based compression algorithm on at least a portion of at least one data stream that is communicated to the second proxy application.

19. (Previously presented) The method of Claim 13, further comprising communicating the striped data stream over a plurality of physical layer connections, wherein at least a portion of the plurality of persistent TCP transport layer connections are provided over each of the plurality of physical layer connections.

20. (Previously presented) A system for enabling communication of a data stream between a source node and a destination node, comprising:

a first proxy application in communication with the source node;

a second proxy application in communication with the destination node,

a plurality of persistent Transmission Control Protocol (TCP) transport layer connections in parallel between the first proxy application and the second proxy application, wherein the

plurality of persistent TCP transport layer connections are provided between the first proxy application and the second proxy application over at least one physical layer connection;

a first TCP transport layer client connection that enables the first proxy application to forward the data stream from the source node to the destination node, wherein the first proxy application stripes the data stream over the plurality of persistent TCP transport layer connections to the second proxy application; and

a second TCP transport layer client connection that enables the second proxy application to communicate the striped data stream received over the plurality of persistent TCP transport layer connections to the destination node.

21. (Previously presented) The system of Claim 20, further comprising:

enabling the communication of the data stream to the destination node to appear to the source node as occurring directly over the first TCP transport layer client connection; and

enabling communication of the data stream from the source node to appear to the destination node as occurring directly over the second TCP transport layer client connection.

22. (Previously presented) The system of Claim 20, further comprising if the destination node is remote to the source node, providing the data stream to the first proxy application over a socket interface.

23. (Previously presented) The system of Claim 20, if a plurality of striped data streams are provided over the plurality of persistent TCP transport layer connections, enabling the first proxy application to employ a dictionary based compression algorithm on at least a portion of at least one data stream that is communicated to the second proxy application.

24. (Previously presented) The system of Claim 20, further comprising communicating the striped data stream over a plurality of physical layer connections, wherein at least a portion of the plurality of persistent TCP transport layer connections are provided over each of the plurality of physical layer connections.

25. (Currently amended) A network device for enabling communication of a data stream between a source node and a destination node, comprising:

a memory for storing data[[,]] ; and

a processor for executing the stored data, wherein the execution of the stored data enables actions, including:

enabling establishment of a plurality of persistent Transmission Control Protocol (TCP) transport layer connections in parallel between a first proxy application in communication with the source node and a second proxy application in communication with the destination node, wherein the plurality of persistent TCP transport layer connections are provided between the first proxy application and the second proxy application over at least one physical layer connection;

enabling the first proxy application to receive the data stream for the destination node from the source node over a first TCP transport layer client connection, wherein the first proxy application stripes the data stream over the plurality of persistent TCP transport layer connections to the second proxy application; and

enabling the second proxy application to provide the striped data stream received over the plurality of persistent TCP transport layer connections to the destination node over a second TCP transport layer client connection.

26. (Previously presented) The network device of Claim 25, further comprising:

enabling the communication of the data stream to the destination node to appear to the source node as occurring directly over the first TCP transport layer client connection; and

enabling communication of the data stream from the source node to appear to the destination node as occurring directly over the second TCP transport layer client connection.

27. (Previously presented) The network device of Claim 25, further comprising if the destination node is remote to the source node, providing the data stream to the first proxy application over a socket interface.

28. (Previously presented) The network device of Claim 25, if a plurality of data streams are provided over the plurality of persistent TCP transport layer connections, enabling the first proxy application to employ a dictionary based compression algorithm on at least a portion of at least one data stream that is communicated to the other proxy application.

29. (Previously presented) The network device of Claim 25, further comprising communicating the striped data stream over a plurality of physical layer connections, wherein at least a portion of the plurality of persistent TCP transport layer connections are provided over each of the plurality of physical layer connections.